Accounting Standard Changes: Classroom Cases on Credit Losses and Leases

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Abstract

Learning by doing is one of the best ways to ensure accounting students are prepared for real-world scenarios. This document contains 2 case studies meant to provide students with the opportunity to practice applying two of the newest accounting standards: the new credit loss standard and the new leasing standard. The credit loss case study is designed for a graduate class. This case involves both credit losses and fair value adjustments. The second case is focused on impairment of a leased asset and is designed for undergraduate students studying intermediate accounting. These cases require students to practice and apply both analytical and computational skills in completing the requirements. Students who completed these case studies generally reported a deeper understanding of the material and appreciated working through the accounting procedures from start to finish.

Introduction and Overview

In recent years, the Financial Accounting Standards Board (FASB) has issued major accounting standard updates that public companies have just started to adopt. Among these standards is the new credit loss standard, Accounting Standards Codification (ASC) Topic 326, which replaces the existing incurred loss standard for credit losses. Moreover, public companies are also in the process of adopting the new leasing standard, ASC Topic 842, which offers new guidance on the treatment of operating leases.

This document contains two case studies that focus on the application of these topics using a fictional metal alloy manufacturing company set in an environment simulating real-life scenarios. These case studies were created to provide students the opportunity to supplement traditional lecture-style learning techniques by giving them the chance to apply these new

standards in an engaging format. The first case study applies the guidance of the credit loss standard to asset-backed securities and requires students to understand accounting for credit losses and fair value adjustments from when the asset is purchased to when it is sold. The second case consists of two parts. The first part focuses on the impairment of an operating lease and requires students to research accounting literature and record impairment losses for an asset group. The second part focuses on recording the lease transactions before and after impairment, allowing students to discover how impairments affect lease accounting.

Background

Credit Loss Standard

Credit losses arise from financial assets that are partially uncollectible. Accounting for credit losses recently changed and is effective for public companies with fiscal years starting after December 15, 2019. This standard was issued as a result of the 2008 financial crisis, during which investors felt that financial statements provided a poor representation of a company's financial position. This new standard covers a variety of financial assets such as loan receivables and debt investments. One form of these debt investments is asset-backed securities. Under the new standard, a contra-asset account, such as an allowance for credit losses, is set up at the date credit losses are first expected for the security. As a result, the amount that is expected to be collected is presented on the balance sheet (FASB, 2016(B)). As time progresses and financial expectations change, these estimates can be revised and reversed if necessary.

Asset-Backed Securities

The guidance provided on the treatment of credit losses under the new standard can be applied to asset-backed securities. An asset-backed security is a type of investment that is secured by

some form of a financial asset, including receivables. It is common for loan receivables from mortgages or other loans to back these securities. When auto loans are used to back these securities, they are typically grouped into a trust, which is used as collateral to secure these investments. Through the securitization process, these loans are bundled together, often by a third party, and the resulting securities are sold to investors. The party that services the loans takes a portion of the loan receivables as a fee. In the event of delinquencies, the entity servicing the loan receives its portion of the receivables before the investors do. As a result, the first party to suffer losses would be the investors of the securities (Fowerbaugh & Rodriguez Aldort, 2018).

In 2018, Eisen suggested that there was an increase in auto loan backed securities offered in the sub-prime category. Typically, the people who hold these loans have credit scores in the low 600 range and take out these loans with longer terms. Furthermore, ninety-plus day delinquency rates on auto loans have risen since 2012, which is not a good sign for investments backed by these loans. Also, according to Eisen, it is not atypical to see these securities offer returns over six percent, which is about double the rate offered on 10-year Treasury bonds, as of December 2018. While some people invest in these bonds with hopes of higher returns, the increased risk is enough to scare many investors away. Eisen also argues that other investors, reassured by the good performance of these securities through the previous financial crisis, feel that these securities are safe enough considering the high returns and will continue to invest (Eisen, 2018). It is not atypical for companies to purchase these types of securities in hopes of high returns. When creating financial statements, management must pay close attention to the value of these securities due to the increased risk associated with them.

CarMax, the nation's largest used car dealer, directly issues loans to its car buyers. In 2017, Alpert, a senior writer at Barron's, observed that the portion of CarMax's lowest-rated loans, "C"

loans, increased from less than eleven percent of total loans in 2011 to sixteen percent of total loans in 2016. While the percentage of sub-prime loans is rising, the recovery rates on repossessed cars can vary. In May 2015, the expected recovery rate on repossessed vehicles was about 54.8% for CarMax, which fell to just 46.2% in November 2016 due to the increased supply of off-lease vehicles and overall lower demand for used vehicles because of the safety advancements in new models. This should raise concerns for CarMax and other auto finance companies, as more frequent loan delinquencies and decreases in recovery rates cut into the company's profitability (Alpert, 2017).

The increase in auto backed security offerings, suggested by Eisen, offers an opportunity for companies to purchase these offerings as investments. Moreover, the increase in sub-prime auto loan offerings and decreased recover rates, as mentioned by Alpert, may affect the collectability of these investments. This data presented motivated the inclusion of this type of asset-backed security within the credit loss case.

New Lease Standard

Leases, which convey the right to control an asset, are used by many companies and are necessary for their day to day operations to take place. There are two primary classifications for leases: operating and financing/sales-type leases, which are determined based on the contractual terms of the lease. New guidelines for reporting these leases were recently put into place, effective for fiscal years starting after December 15, 2018, for public companies. Under the previous standard, lessees were not required to record a right-of-use asset or a liability on their balance sheet for operating type leases. Under the new standard, lessees are required to recognize a right-of-use asset and corresponding liability on their balance sheet. The new standard was

created to encourage a more faithful representation of a company's financial position so that financial statements can be more useful in making educated decisions (FASB, 2016(A)).

Impairment of a Right of Use Asset

The new requirement for lessees to record a right of use asset on the company’s balance sheet for operating leases provides the potential opportunity for impairment, which would not have previously been considered for operating leases. This impairment must be performed in accordance with ASC Topic 360, which provides guidance on the impairment of long-term assets such as property, plant, and equipment. This guidance requires lessees to consider the fair value of leased assets in determining if an impairment exists, as well as to consider renewal and purchase options at the end of the lease period (Pricewaterhouse Coopers, 2020).

Case 1: Everything Alloys Credit Loss Case

The Company

Everything Alloys is a metal alloy manufacturing company that creates and sells both ordinary and custom order pure metals and alloys. From stainless steel sheets to large metal blanks, Everything Alloys produces them all.

The process starts with raw metal that the company purchases from mines. These metals are melted down into precise blends of alloys, including special order combinations. Most of these alloys are then sold as is to other manufacturing companies that will use these alloys to produce their quality goods. One of the company's largest customer groups is wheel manufactures that request very specific combinations in order to create their high-quality products. While these raw-material sales make up the majority of Everything Alloys' revenue, the company also further produce some of the alloys that they create into more processed materials such as stainless-steel sheets. These more processed material sales make up about thirty-five percent of Everything Alloy's revenue, while the raw-material sales make up the remaining sixty-five percent of revenue.

Everything Alloys has created a very successful business. Over the past 10 years, profits have increased by about 9% per year. This growth can be attributed to the decrease in manufacturing costs since the company began to focus on decreasing waste, as well as a slow increase in sales prices. Generally, Everything Alloys' customers are pleased with the high-quality products and fast response time to orders so they continually return to purchase more. This has allowed the company to grow into one of the leading metal suppliers in the Northeast.

Use of Excess Cash

Everything Alloys has been known to invest excess cash in order to earn a profit on excess funds. These investments are typically government securities accounted for as available for sale in the company's financial statements. Due to the recent success of Everything Alloys, the company had a substantial amount of cash on hand that management looked to invest in hopes of earning a respectable return. When weighing the options, management decided to invest a small portion in an asset-backed security (ABS) because of the attractiveness of the return rate offered.

One investment opportunity that Everything Alloys discovered was a portion of a $500 million offering backed by a grouping of 5-year auto loans. This group of loans consists of subprime auto loans. See figure 1 for a representation of a $1 million interest in this offering. This schedule takes into account excess collateral in anticipation of loan defaults. In addition, a portion of the loan collection will be used to cover fees paid to the loan servicer.

On 11/1/X1, Everything Alloys purchased a 5-year security investment backed by auto loans in the form of a $1 million ABS. This $1 million ABS is a proportionate interest in the total $500 million offering and had a $1 million face value and 6.25% stated interest rate. Monthly payments are received and include both principal and interest. An amortization schedule for this $1 million investment can be found in figure 2. At the end of year 1, the fair value of this investment was $970,000. As of 12/31/Year 1, no credit losses are anticipated.

Year 2

Due to decreased demand in the marketplace, overall liquidity has been reduced for asset-backed securities in Year 2. At the same time, the expected default rate on auto loans began to rise due to deteriorating economic conditions. The slowing economy also threatened recovery rates on

repossessed vehicles (the amount that can be recovered when repossessed vehicles are sold at auction). As a result, the company now expected that it may no longer collect the full original promised payments. The fair value of this investment at the end of year 2 was $730,000. A new, expected loan amortization schedule as of 12/31/X2 is presented in figure 3. This new schedule takes into account a new, higher expected default rate and reduced recovery rates and is Alloy's schedule.

Year 3

During Year 3, the economy improved and the revised delinquency rates Everything Alloys used in its Year 2 predictions was determined to be overstated. Everything Alloys now estimates that the actual present value of the amount expected to be collected over the remaining life of the security is $598,000 as of 12/31/X3. Up to this point in time, actual cash flows matched promised cash flows, as it is most likely that any default payments would come closer to the end of the security's 5-year life. The fair value of the investment as of 12/31/X3 was $600,000. [Note: even though Management decided to sell this investment on January 2, Year 4, this decision was not known as of December 31, Year 3. Management's position is that for purposes of the Year 3 financial statements, the entity did not intend to sell this security or would not be required to sell this security].

Year 4

The investment is sold for $600,000 on January 2, Year 4.

Required:

Assume an income tax rate of 20% for all years. You are not required to do income tax entries or determine any balance in a deferred tax asset or deferred tax liability account.

1. What is a credit loss on an available-for-sale security? Distinguish between credit losses and declines in fair value for other reasons.
2. What are the FASB's requirements for reporting credit losses on available-for-sale securities? Provide proper citations to the Accounting Standards Codification.
3. Complete the following for Year 1:
    a. Provide a journal entry to record the initial investment on 11/1/X1.
    b. Provide a journal entry or entries to record the decline in fair value as of 12/31/X1.
    c. Provide the balances in the investment account and the fair value adjustment account as of 12/31/X1.
    d. Assume Year 1 income of $100,000 before considering this investment. Determine Year 1 net income and prepare a statement of comprehensive income. (hint: remember interest revenue when computing net income).
4. Complete the following for Year 2:
    a. Provide a journal entry or entries to record the change in fair value and any credit losses as of 12/31/X2
    b. Provide the 12/31/X2 balances in the investment account, fair value adjustment account, and allowance for credit losses account.
    c. Assume Year 2 income of $100,000 before considering this investment. Determine Year 2 net income and prepare a statement of comprehensive income.

5. Complete the following for Year 3:
    a. Is there an increase or reduction in the expected credit loss?
    b. Using the Accounting Standards Codification and proper citations, explain what a company should do with this revised information.
    c. Provide a journal entry or journal entries to record the change in fair value and properly adjust credit losses.
    d. Provide the balances in the investment account, fair value adjustment account, and allowance for credit losses account.
    e. Assume Year 3 income of $100,000 before considering this investment. Determine Year 3 net income and prepare a statement of comprehensive income for Year 3.
6. Complete the following for Year 4:
    a. Provide a journal entry or journal entries to record the sale of this investment on 1/2/X4 and to record the reclassification adjustment.
    b. Assume Year 4 income of $100,000 before considering this investment. Determine Year 4 net income and prepare a Year 4 statement of comprehensive income.

Figure 1

*denotes a year-end balance

Year 1 Loan Schedule					
Month	Present Value	Payment	Principal	Interest	Ending Balance
1	$1,040,000.00	$20,227.23	$14,810.57	$5,416.67	$1,025,189.43
2	$1,025,189.43	$20,227.23	$14,887.70	$5,339.53	$1,010,301.73*
3	$1,010,301.73	$20,227.23	$14,965.24	$5,261.99	$995,336.49
4	$995,336.49	$20,227.23	$15,043.19	$5,184.04	$980,293.30
5	$980,293.30	$20,227.23	$15,121.54	$5,105.69	$965,171.76
6	$965,171.76	$20,227.23	$15,200.30	$5,026.94	$949,971.46
7	$949,971.46	$20,227.23	$15,279.46	$4,947.77	$934,692.00
8	$934,692.00	$20,227.23	$15,359.04	$4,868.19	$919,332.96
9	$919,332.96	$20,227.23	$15,439.04	$4,788.19	$903,893.92
10	$903,893.92	$20,227.23	$15,519.45	$4,707.78	$888,374.47
11	$888,374.47	$20,227.23	$15,600.28	$4,626.95	$872,774.18
12	$872,774.18	$20,227.23	$15,681.53	$4,545.70	$857,092.65
13	$857,092.65	$20,227.23	$15,763.21	$4,464.02	$841,329.44
14	$841,329.44	$20,227.23	$15,845.31	$4,381.92	$825,484.13*
15	$825,484.13	$20,227.23	$15,927.84	$4,299.40	$809,556.30
16	$809,556.30	$20,227.23	$16,010.79	$4,216.44	$793,545.51
17	$793,545.51	$20,227.23	$16,094.18	$4,133.05	$777,451.32
18	$777,451.32	$20,227.23	$16,178.01	$4,049.23	$761,273.32
19	$761,273.32	$20,227.23	$16,262.27	$3,964.97	$745,011.05
20	$745,011.05	$20,227.23	$16,346.97	$3,880.27	$728,664.08
21	$728,664.08	$20,227.23	$16,432.11	$3,795.13	$712,231.98
22	$712,231.98	$20,227.23	$16,517.69	$3,709.54	$695,714.29
23	$695,714.29	$20,227.23	$16,603.72	$3,623.51	$679,110.57
24	$679,110.57	$20,227.23	$16,690.20	$3,537.03	$662,420.37
25	$662,420.37	$20,227.23	$16,777.13	$3,450.11	$645,643.24
26	$645,643.24	$20,227.23	$16,864.51	$3,362.73	$628,778.73*
27	$628,778.73	$20,227.23	$16,952.34	$3,274.89	$611,826.39
28	$611,826.39	$20,227.23	$17,040.64	$3,186.60	$594,785.76
29	$594,785.76	$20,227.23	$17,129.39	$3,097.84	$577,656.37
30	$577,656.37	$20,227.23	$17,218.61	$3,008.63	$560,437.76

31	$560,437.76	$20,227.23	$17,308.29	$2,918.95	$543,129.47
32	$543,129.47	$20,227.23	$17,398.43	$2,828.80	$525,731.04
33	$525,731.04	$20,227.23	$17,489.05	$2,738.18	$508,241.99
34	$508,241.99	$20,227.23	$17,580.14	$2,647.09	$490,661.85
35	$490,661.85	$20,227.23	$17,671.70	$2,555.53	$472,990.15
36	$472,990.15	$20,227.23	$17,763.74	$2,463.49	$455,226.41
37	$455,226.41	$20,227.23	$17,856.26	$2,370.97	$437,370.15
38	$437,370.15	$20,227.23	$17,949.26	$2,277.97	$419,420.89*
39	$419,420.89	$20,227.23	$18,042.75	$2,184.48	$401,378.14
40	$401,378.14	$20,227.23	$18,136.72	$2,090.51	$383,241.42
41	$383,241.42	$20,227.23	$18,231.18	$1,996.05	$365,010.23
42	$365,010.23	$20,227.23	$18,326.14	$1,901.09	$346,684.10
43	$346,684.10	$20,227.23	$18,421.59	$1,805.65	$328,262.51
44	$328,262.51	$20,227.23	$18,517.53	$1,709.70	$309,744.98
45	$309,744.98	$20,227.23	$18,613.98	$1,613.26	$291,131.00
46	$291,131.00	$20,227.23	$18,710.92	$1,516.31	$272,420.08
47	$272,420.08	$20,227.23	$18,808.38	$1,418.85	$253,611.70
48	$253,611.70	$20,227.23	$18,906.34	$1,320.89	$234,705.36
49	$234,705.36	$20,227.23	$19,004.81	$1,222.42	$215,700.55
50	$215,700.55	$20,227.23	$19,103.79	$1,123.44	$196,596.76*
51	$196,596.76	$20,227.23	$19,203.29	$1,023.94	$177,393.47
52	$177,393.47	$20,227.23	$19,303.31	$923.92	$158,090.16
53	$158,090.16	$20,227.23	$19,403.85	$823.39	$138,686.32
54	$138,686.32	$20,227.23	$19,504.91	$722.32	$119,181.41
55	$119,181.41	$20,227.23	$19,606.50	$620.74	$99,574.91
56	$99,574.91	$20,227.23	$19,708.61	$518.62	$79,866.30
57	$79,866.30	$20,227.23	$19,811.26	$415.97	$60,055.04
58	$60,055.04	$20,227.23	$19,914.45	$312.79	$40,140.59
59	$40,140.59	$20,227.23	$20,018.17	$209.07	$20,122.43
60	$20,122.43	$20,227.23	$20,122.43	$104.80	$0.00

Figure 2

Security Schedule

Month	Beginning Balance	Payment	Principal	Interest	Ending Balance
1	$1,000,000.00	$19,449.26	$14,240.93	$5,208.33	$985,759.07
2	$985,759.07	$19,449.26	$14,315.10	$5,134.16	$971,443.97*
3	$971,443.97	$19,449.26	$14,389.66	$5,059.60	$957,054.31
4	$957,054.31	$19,449.26	$14,464.60	$4,984.66	$942,589.71
5	$942,589.71	$19,449.26	$14,539.94	$4,909.32	$928,049.77
6	$928,049.77	$19,449.26	$14,615.67	$4,833.59	$913,434.10
7	$913,434.10	$19,449.26	$14,691.79	$4,757.47	$898,742.31
8	$898,742.31	$19,449.26	$14,768.31	$4,680.95	$883,974.00
9	$883,974.00	$19,449.26	$14,845.23	$4,604.03	$869,128.77
10	$869,128.77	$19,449.26	$14,922.55	$4,526.71	$854,206.22
11	$854,206.22	$19,449.26	$15,000.27	$4,448.99	$839,205.95
12	$839,205.95	$19,449.26	$15,078.40	$4,370.86	$824,127.55
13	$824,127.55	$19,449.26	$15,156.93	$4,292.33	$808,970.62
14	$808,970.62	$19,449.26	$15,235.87	$4,213.39	$793,734.74*
15	$793,734.74	$19,449.26	$15,315.23	$4,134.04	$778,419.52
16	$778,419.52	$19,449.26	$15,394.99	$4,054.27	$763,024.52
17	$763,024.52	$19,449.26	$15,475.18	$3,974.09	$747,549.35
18	$747,549.35	$19,449.26	$15,555.78	$3,893.49	$731,993.57
19	$731,993.57	$19,449.26	$15,636.80	$3,812.47	$716,356.78
20	$716,356.78	$19,449.26	$15,718.24	$3,731.02	$700,638.54
21	$700,638.54	$19,449.26	$15,800.10	$3,649.16	$684,838.44
22	$684,838.44	$19,449.26	$15,882.39	$3,566.87	$668,956.04
23	$668,956.04	$19,449.26	$15,965.12	$3,484.15	$652,990.93
24	$652,990.93	$19,449.26	$16,048.27	$3,400.99	$636,942.66
25	$636,942.66	$19,449.26	$16,131.85	$3,317.41	$620,810.81
26	$620,810.81	$19,449.26	$16,215.87	$3,233.39	$604,594.94*
27	$604,594.94	$19,449.26	$16,300.33	$3,148.93	$588,294.61
28	$588,294.61	$19,449.26	$16,385.23	$3,064.03	$571,909.38
29	$571,909.38	$19,449.26	$16,470.57	$2,978.69	$555,438.81
30	$555,438.81	$19,449.26	$16,556.35	$2,892.91	$538,882.46
31	$538,882.46	$19,449.26	$16,642.58	$2,806.68	$522,239.88
32	$522,239.88	$19,449.26	$16,729.26	$2,720.00	$505,510.62

33	$505,510.62	$19,449.26	$16,816.39	$2,632.87	$488,694.22
34	$488,694.22	$19,449.26	$16,903.98	$2,545.28	$471,790.24
35	$471,790.24	$19,449.26	$16,992.02	$2,457.24	$454,798.22
36	$454,798.22	$19,449.26	$17,080.52	$2,368.74	$437,717.70
37	$437,717.70	$19,449.26	$17,169.48	$2,279.78	$420,548.22
38	$420,548.22	$19,449.26	$17,258.91	$2,190.36	$403,289.31*
39	$403,289.31	$19,449.26	$17,348.80	$2,100.47	$385,940.52
40	$385,940.52	$19,449.26	$17,439.15	$2,010.11	$368,501.36
41	$368,501.36	$19,449.26	$17,529.98	$1,919.28	$350,971.38
42	$350,971.38	$19,449.26	$17,621.29	$1,827.98	$333,350.09
43	$333,350.09	$19,449.26	$17,713.06	$1,736.20	$315,637.03
44	$315,637.03	$19,449.26	$17,805.32	$1,643.94	$297,831.71
45	$297,831.71	$19,449.26	$17,898.05	$1,551.21	$279,933.66
46	$279,933.66	$19,449.26	$17,991.27	$1,457.99	$261,942.38
47	$261,942.38	$19,449.26	$18,084.98	$1,364.28	$243,857.40
48	$243,857.40	$19,449.26	$18,179.17	$1,270.09	$225,678.23
49	$225,678.23	$19,449.26	$18,273.85	$1,175.41	$207,404.38
50	$207,404.38	$19,449.26	$18,369.03	$1,080.23	$189,035.35*
51	$189,035.35	$19,449.26	$18,464.70	$984.56	$170,570.65
52	$170,570.65	$19,449.26	$18,560.87	$888.39	$152,009.77
53	$152,009.77	$19,449.26	$18,657.54	$791.72	$133,352.23
54	$133,352.23	$19,449.26	$18,754.72	$694.54	$114,597.51
55	$114,597.51	$19,449.26	$18,852.40	$596.86	$95,745.11
56	$95,745.11	$19,449.26	$18,950.59	$498.67	$76,794.52
57	$76,794.52	$19,449.26	$19,049.29	$399.97	$57,745.23
58	$57,745.23	$19,449.26	$19,148.51	$300.76	$38,596.73
59	$38,596.73	$19,449.26	$19,248.24	$201.02	$19,348.49
60	$19,348.49	$19,449.26	$19,348.49	$100.77	$0.00

Figure 3

Year 2 Loan Schedule

Month	Present Value	Payment	Principal	Interest	Ending Balance
14	$764,396.38	$18,377.61	$14,396.38	$3,981.23	$750,000.00*
15	$750,000.00	$18,377.61	$14,471.36	$3,906.25	$735,528.64
16	$735,528.64	$18,377.61	$14,546.73	$3,830.88	$720,981.91
17	$720,981.91	$18,377.61	$14,622.49	$3,755.11	$706,359.42
18	$706,359.42	$18,377.61	$14,698.65	$3,678.96	$691,660.76
19	$691,660.76	$18,377.61	$14,775.21	$3,602.40	$676,885.56
20	$676,885.56	$18,377.61	$14,852.16	$3,525.45	$662,033.39
21	$662,033.39	$18,377.61	$14,929.52	$3,448.09	$647,103.88
22	$647,103.88	$18,377.61	$15,007.28	$3,370.33	$632,096.60
23	$632,096.60	$18,377.61	$15,085.44	$3,292.17	$617,011.16
24	$617,011.16	$18,377.61	$15,164.01	$3,213.60	$601,847.15
25	$601,847.15	$18,377.61	$15,242.99	$3,134.62	$586,604.16
26	$586,604.16	$18,377.61	$15,322.38	$3,055.23	$571,281.79*
27	$571,281.79	$18,377.61	$15,402.18	$2,975.43	$555,879.60
28	$555,879.60	$18,377.61	$15,482.40	$2,895.21	$540,397.20
29	$540,397.20	$18,377.61	$15,563.04	$2,814.57	$524,834.16
30	$524,834.16	$18,377.61	$15,644.10	$2,733.51	$509,190.07
31	$509,190.07	$18,377.61	$15,725.58	$2,652.03	$493,464.49
32	$493,464.49	$18,377.61	$15,807.48	$2,570.13	$477,657.01
33	$477,657.01	$18,377.61	$15,889.81	$2,487.80	$461,767.20
34	$461,767.20	$18,377.61	$15,972.57	$2,405.04	$445,794.63
35	$445,794.63	$18,377.61	$16,055.76	$2,321.85	$429,738.86
36	$429,738.86	$18,377.61	$16,139.39	$2,238.22	$413,599.48
37	$413,599.48	$18,377.61	$16,223.44	$2,154.16	$397,376.03
38	$397,376.03	$18,377.61	$16,307.94	$2,069.67	$381,068.09*
39	$381,068.09	$18,377.61	$16,392.88	$1,984.73	$364,675.21
40	$364,675.21	$18,377.61	$16,478.26	$1,899.35	$348,196.96
41	$348,196.96	$18,377.61	$16,564.08	$1,813.53	$331,632.87
42	$331,632.87	$18,377.61	$16,650.35	$1,727.25	$314,982.52
43	$314,982.52	$18,377.61	$16,737.07	$1,640.53	$298,245.45
44	$298,245.45	$18,377.61	$16,824.25	$1,553.36	$281,421.20
45	$281,421.20	$18,377.61	$16,911.87	$1,465.74	$264,509.33

46	$264,509.33	$18,377.61	$16,999.96	$1,377.65	$247,509.37
47	$247,509.37	$18,377.61	$17,088.50	$1,289.11	$230,420.87
48	$230,420.87	$18,377.61	$17,177.50	$1,200.11	$213,243.37
49	$213,243.37	$18,377.61	$17,266.97	$1,110.64	$195,976.41
50	$195,976.41	$18,377.61	$17,356.90	$1,020.71	$178,619.51*
51	$178,619.51	$18,377.61	$17,447.30	$930.31	$161,172.21
52	$161,172.21	$18,377.61	$17,538.17	$839.44	$143,634.04
53	$143,634.04	$18,377.61	$17,629.51	$748.09	$126,004.53
54	$126,004.53	$18,377.61	$17,721.33	$656.27	$108,283.19
55	$108,283.19	$18,377.61	$17,813.63	$563.97	$90,469.56
56	$90,469.56	$18,377.61	$17,906.41	$471.20	$72,563.15
57	$72,563.15	$18,377.61	$17,999.68	$377.93	$54,563.47
58	$54,563.47	$18,377.61	$18,093.42	$284.18	$36,470.05
59	$36,470.05	$18,377.61	$18,187.66	$189.95	$18,282.39
60	$18,282.39	$18,377.61	$18,282.39	$95.22	$0.00

Case 1: Solutions for Everything Alloys Credit Loss Case Study

1. **What is a credit loss on an available-for-sale security? Distinguish between credit losses and declines in fair value for other reasons.**

   A Credit loss on available for sale securities is a portion of the security that is impaired, meaning the full value of the security is not expected to be collectible. These arise from a decrease in expected future cash flows. Declines in fair value for other reasons are not credit losses. These declines in value can be attributable to changing market conditions such as decreased liquidity in the marketplace or an increase in the interest rates of similar securities.

2. **What are the FASB's requirements for reporting credit losses on available-for-sale securities? Provide proper citations to the Accounting Standards Codification.**

   "For individual debt securities classified as available-for-sale securities, an entity shall determine whether a decline in fair value below the amortized cost basis has resulted from a credit loss or other factors. An entity shall record impairment relating to credit losses through an allowance for credit losses. However, the allowance shall be limited by the amount that the fair value is less than the amortized cost basis. Impairment that has not been recorded through an allowance for credit losses shall be recorded through other comprehensive income, net of applicable taxes" (ASC Topic 326-35-2).

3. Complete the following for Year 1:

a. Provide a journal entry to record the initial investment on 11/1/X1.

AFS Debt Security	$1,000,000	
Cash		$1,000,000

b. Provide a journal entry or entries to record the decline in fair value as of 12/31/X1.

Unrealized holding loss- OCI	$1,443.97	
Fair value adjustment		$1,443.97

c. Provide the balances in the investment account and the fair value adjustment account as of 12/31/X1. Use parenthesis to indicate a credit balance.

AFS Debt Security:	$971,443.97
Fair value adjustment:	($1,443.97)

d. Assume Year 1 income of $100,000 before considering this investment. Determine Year 1 net income and prepare a statement of comprehensive income. (hint: remember interest revenue when computing net income).

Everything Alloys

Statement of Comprehensive Income

Year Ended December 31, 20X1

Net income (loss) before investment:		100,000.00
Interest income		10,342.50
Income before tax		110,342.50
Income tax expense		(22,068.50)
Net income (loss)		88,274.00
Other comprehensive income		
Unrealized holding loss	(1.443.97)	
Income tax benefit	288.79	(1,155.88)
Comprehensive income		$87,118.82

4. Complete the following for Year 2:

a. Provide a journal entry or entries to record the change in fair value and any credit losses as of 12/31/X2

Journal entry to record the decline in fair value as of 12/31/X2

Unrealized holding loss- OCI	$18,556.03	
Fair value adjustment		$18,556.03

Journal entry to record credit losses as of 12/31/X2

Credit loss expense	$43,734.74	
Allowance for credit losses		$43,734.74

b. Provide the 12/31/X2 balances in the investment account, fair value adjustment account, and allowance for credit losses account.

AFS Debt Security:	$793,734.74
Fair value adjustment:	($20,000)
Allowance for credit losses:	($43,734.74)

c. Assume Year 2 income of $100,000 before considering this investment. Determine Year 2 net income and prepare a statement of comprehensive income.

Everything Alloys

Statement of Comprehensive Income

Year Ended December 31, 20X2

Net income (loss) before investment:		100,000.00
Interest income		55,681.91
Credit loss expense:		(43,734.74)
Income before tax		111,947.17
Income tax expense		(22,389.43)
Net income (loss)		89,557.74
Other comprehensive income		
Unrealized holding loss	(18,556.03)	
Income tax benefit	3,711.21	(14,844.82)
Comprehensive income		74,712.92

5. Complete the following for Year 3:

a. Is there an increase or reduction in the expected credit loss?

There is a reduction in the expected credit losses

b. Using the Accounting Standards Codification and proper citations, explain what a company should do with this revised information.

"An entity shall reassess the credit losses each reporting period when there is an allowance for credit losses. An entity shall record subsequent changes in the allowance for credit losses on available-for-sale debt securities with a corresponding adjustment recorded in the credit loss expense on available-for-sale debt securities. An entity shall not reverse a previously recorded allowance for credit losses to an amount below zero" (ASC Topic 326-35-12).

c. Provide a journal entry or journal entries to record the change in fair value and properly adjust credit losses.

Journal entry to record the change in fair value as of 12/31/X3

Fair value adjustment	$20,000	
Unrealized holding gain- OCI		$20,000

Journal entry to adjust credit losses as of 12/31/X3

Allowance for credit losses	$39,139.80	
Credit loss reversal		$39,139.80

d. Provide the balances in the investment account, fair value adjustment account, and allowance for credit losses account.

AFS Debt Security:	$604,594.94
Allowance for credit losses:	($4,594.94)
Fair value adjustment:	$0

e. Assume Year 3 income of $100,000 before considering this investment. Determine Year 3 net income and prepare a statement of comprehensive income for Year 3.

Everything Alloys

Statement of Comprehensive Income

Year Ended December 31, 20X3

Net income (loss) before investment:		100,000.00
Interest income		44,251.33
Credit loss reversal:		39,139.80
Income before tax		183,391.13
Income tax expense		(36,678.23)
Net income (loss)		146,712.90
Other comprehensive income		
Unrealized holding gain	20,000	
Income tax expense	(4,000)	16,000.00
Comprehensive income		162,712.90

6. Complete the following for Year 4:

a. Provide a journal entry or journal entries to record the sale of this investment on 1/2/X4 and to record the reclassification adjustment.

Journal entry to record sale of investment

Cash	$600,000	
Allowance for credit losses:	$4,594.94	
AFS Debt Security		$604,594.94

Journal entry to record reclassification adjustment

No adjustment necessary

b. Assume Year 4 income of $100,000 before considering this investment. Determine Year 4 net income and prepare a Year 4 statement of comprehensive income.

Everything Alloys

Statement of Comprehensive Income

Year Ended December 31, 20X4

Net income (loss) before investment:	100,000.00
Income tax expense	(20,000.00)
Net income (loss)	80,000.00

Case 2: Everything Alloys Lease Impairment Case, Part 1

The Company

Everything Alloys is a metal alloy manufacturing company that creates and sells both ordinary and custom order pure metals and alloys. From stainless steel sheets to large metal blanks, Everything Alloys produces them all.

The process starts with raw metal that the company purchases from mines. These metals are melted down into precise blends of alloys, including special order combinations. Most of these alloys are then sold as is to other manufacturing companies that will use these alloys to produce their quality goods. One of the company's largest customer groups is wheel manufactures that request very specific combinations in order to create their high-quality products. While these raw-material sales make up the majority of Everything Alloys' revenue, the company also further produce some of the alloys that they create into more processed materials such as stainless-steel sheets. These more processed material sales make up about thirty-five percent of Everything Alloy's revenue, while the raw-material sales make up the remaining sixty-five percent of revenue. Internally, the raw material production business is known as the Alloys division, while the further processing division is known as the Beyond the Alloys division.

Everything Alloys has created a very successful business. Over the past 10 years, profits have increased each year. This growth can be attributed to the decrease in manufacturing costs since the company began to focus on decreasing waste, as well as a slow increase in sales prices. The Beyond the Alloys division is a relatively new business venture, as the company began producing these products about 3 years ago when management identified this as an opportunity for expansion. In order to create this new business sector, Everything Alloys needed to open a new factory to further process the raw materials into products such as galvanized metal cladding

and diamond plating that is used to manufacture garage and automotive accessories and toolboxes.

Property, Plant, and Equipment

Alloys Division

All the property, plant, and equipment used in the raw materials production unit was purchased by the company several years ago. Everything Alloys does not use any leases in this business unit. Book values for these assets as of 12/31/year 3 are provided in figure 1.

Beyond the Alloys Division

On January 2nd year 1, Everything Alloys purchased a piece of property with an existing building in order to open a new factory, at a price of $10,000,000. The company allocated $2,000,000 of the purchase price to the cost of the land and $8,000,000 to the cost of the building. The building's useful life was estimated at 25 years. On January 2, Year 1, the Company started an 8-year operating lease on new, state of the art factory equipment necessary to run the operation. This lease included the option to purchase the equipment at the end of the lease for $50,000,000. At the inception of the lease, this option was not expected to be exercised but the decision to purchase could be altered by the division's future performance. The economic life of this equipment was originally estimated at 12 years. December 31, year 3 book values for these assets are listed below in figure 2. No estimate is available for the fair value of the land, building, and leased equipment.

Asset Book Values

Figure 1- Alloys Division

Asset	Book Value	Remaining Life
Land	$5,000,000	Indefinite
Building	$8,100,000	18 years
Equipment	$220,000,000	8 years

Figure 2- Beyond the Alloys Division

Asset	Book Value	Remaining Life
Land	$2,000,000	Indefinite
Building	$7,040,000	22 years
Right of Use Asset-Equipment	$59,890,651	5-year remaining lease*

*purchase option available

Sales Performance and Projections

Alloys Division

Sales within the Alloys division have always been strong. On average, sales have increased by about 6% each year over the past 5 years. While sales remain strong, the company worries about the performance of its equipment in the future. Recently, the equipment has been less reliable, leading to decreased productivity. Therefore, management questions how the productivity of its equipment may impact future cash flows. Management created a table of estimated future cash flows from the Alloys division which is presented below in Figures 3 and 4.

Figure 3- Estimated Cash Flows from operating the Alloys Division

Year 4	Year 5	Year 6
$45,000,000	$45,000,000	$45,000,000
Year 7	**Year 8**	**Year 9**
$42,500,000	$40,000,000	$38,000,000
Year 10	**Year 11**	**Years 12-21**
$36,000,000	$35,000,000	$5,000,000

Figure 4- Hypothetical Future Sales Price for the Alloys Division Fixed Assets

Sale Date	Estimated Cash Received
Year 11	$8,000,000
Year 21	$4,800,000

Beyond the Alloys Division

In the past, 5 main clients contributed to about 80% of Beyond the Alloys division's sales. These companies take the galvanized steel sheets that Everything Alloys' Beyond the Alloys division produces and builds them into toolboxes such as those found in homeowner garages and truck beds, as well as creates cabinetry for homeowner garage use. In the current year, year 3, three of the company's main customers stopped purchasing these galvanized sheets after many of their customers located in the Northeast complained of issues with the metal rusting after just a few years. While the company is looking to improve its product to maintain sales, they do not believe these lost customers will return. Because of these lost customers, Everything Alloys management worries about the profitability of this segment and estimated future cash flows for the Beyond the Alloys division. Projected cash-flow information is provided in figures 5 and 6.

Figure 5- Estimated Cash Flows from operating Beyond the Alloys Division

Year 4	Year 5	Year 6	Year 7
$9,000,000	$9,000,000	$9,000,000	$8,800,000
Year 8	**Year 9**	**Year 10**	**Years 11-25**
$8,500,000	$400,000	$300,000	$300,000

Figure 6- Hypothetical Future Sales Price for Beyond the Alloys Division Fixed Assets

Sale Date	Estimated Value if Sold
Year 8	$7,000,000
Year 25	$3,000,000

Impairment Testing

It is the end of year 3 and management decides that the company's manufacturing assets need to be tested for impairment. The current risk-free discount rate is 2% and the company determines a 6% risk premium rate is appropriate for impairment testing.

Required

Provide complete answers to the following questions. For questions 2, 3, and 5(c), provide appropriate citations to the Accounting Standards Codification (use ASC topic 360-10-35).

1. What conditions would motivate Everything Alloys to perform the 2-step asset impairment test?
2. At what level should impairment testing be performed? Should the Alloys division and the Beyond the Alloys division be combined for impairment testing, or should they be tested as separate entities? (ASC citation required)
3. In determining future cash flows, at what point in time is it assumed assets will be disposed of by Everything Alloys? (ASC citation required)
4. Do you think Everything Alloys will exercise the option to purchase the leased equipment used in the Beyond the Alloys division at the end of the lease? Explain.
5. Complete the following:
    a. Should an impairment loss be reported in year 3?
    b. If yes, how much should be reported using the present value of future cash flows to determine fair value? Assume all cash is received at the end of each year.
    c. How is an impairment loss allocated to various assets in an asset group? (ASC citation required)
    d. Prepare the journal entry to record impairment loss, if any. Be sure to allocate the loss to the proper assets.
6. What is the effect of an impairment loss on income before taxes?

Case 2: Everything Alloys Lease Impairment Case, Part 1 Solutions

1. **What conditions would motivate Everything Alloys to perform the 2-step asset impairment test?**
    - Management would be motivated to conduct impairment testing due to the change in circumstances including the decreased productivity of the equipment within the Alloys division as well as the product defects and lost sales within the Beyond the Alloys division.
    - "A long-lived asset (asset group) shall be tested for recoverability whenever events or changes in circumstances indicate that its carrying amount may not be recoverable" (ASC 360-10-35-21).
2. **At what level should impairment testing be performed? Should the Alloys division and the Beyond the Alloys division be combined for impairment testing, or should they be tested as separate entities? (ASC citation required)**
    - "For purposes of recognition and measurement of an impairment loss, a long-lived asset or assets shall be grouped with other assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities" (ASC 360-10-35-23).
    - The two divisions should be kept separate for impairment testing because they have separately identifiable cash flow projections.
3. **In determining future cash flows, at what point in time is it assumed assets will be disposed of by Everything Alloys?**
    - "Estimates of future cash flows used to test the recoverability of a long-lived asset (asset group) shall be made for the remaining useful life of the asset (asset group) to

the entity. The remaining useful life of an asset group shall be based on the remaining useful life of the primary asset of the group. For purposes of this Subtopic, the primary asset is the principal long-lived tangible asset being depreciated or intangible asset being amortized that is the most significant component asset from which the asset group derives its cash-flow-generating capacity. The primary asset of an asset group therefore cannot be land or an intangible asset not being amortized" (ASC 360-10-35-31).

- "Estimates of future cash flows used to test the recoverability of a long-lived asset (asset group) shall include only the future cash flows (cash inflows less associated cash outflows) that are directly associated with and that are expected to arise as a direct result of the use and eventual disposition of the asset (asset group). Those estimates shall exclude interest charges that will be recognized as an expense when incurred" (ASC 360-10-35-29).
- The assumed sale of the Alloys division assets would be 8 years from the current date, or year 11. For the Beyond the Alloys division, the assumed sale date of the assets would be 5 years from the current date, or year 8. 12/31/X8 is considered the end of the useful life of the primary asset (the leased equipment) in this group.

4. **Do you think Everything Alloys will exercise the option to purchase the leased equipment used in the Beyond the Alloys division at the end of the lease? Explain.**
    - No, I do not think that Everything Alloys will exercise the purchase option because the company is in a position where it is having a difficult time generating cash flows from these leased assets.

5.

a. Should an impairment loss be reported in year 3?

Yes

c. If yes, how much should be reported using the expected present value technique?

Loss of $28,719,497; see appendix 1 for calculations

d. How is an impairment loss allocated to various assets in an asset group? Provide a citation to the Accounting Standards Codification.

"An impairment loss for an asset group shall reduce only the carrying amounts of a long-lived asset or assets of the group. The loss shall be allocated to the long-lived assets of the group on a pro rata basis using the relative carrying amounts of those assets, except that the loss allocated to an individual long-lived asset of the group shall not reduce the carrying amount of that asset below its fair value whenever that fair value is determinable without undue cost and effort" (ASC 360-10-35-28).

e. Prepare the journal entry to record impairment loss, if any. Be sure to allocate the loss to the proper assets.

Loss on Impairment	$28,719,497	
Right of Use Asset- Equipment		$24,954,371
Accumulated Depreciation		$2,932,261
Land		$832,865

See appendix 1 for calculations

6. What is the effect of an impairment loss on income before taxes?

The impairment loss decreases net income before taxes by the amount of the loss; in this case $28,719,497

Appendix 1- Calculations:

Comparison of book values and undiscounted future cash flows:

Alloys Division

From figure 1- Book value: $5,000,000 + $8,100,000 + $220,000,000 = **$233,100,000**

From figure 3- Undiscounted Cash Flows: $45,000,000 x 3 + $42,500,000 + $40,000,000 + $38,000,000 + $36,000,000 + $43,000,000*= **$334,500,000**

*$43,000,000 calculated by adding the year 11 estimated cash flow of $35,000,000 from figure 3 and the year 11 assumed sale price of $8,000,000 from figure 4

No impairment loss reported because future cash flow projections are greater than book value

Beyond the Alloys Division

From figure 2- Book Value: $2,000,000 + $7,040,000 + $59,890,651 = **$68,930,651**

From figure 5- Undiscounted Cash Flows: $9,000,000 x 3 + $8,800,000 + $15,500,000* = **$51,300,000**

*$15,500,000 calculated by adding the year 8 estimated cash flow of $8,500,000 from figure 5 and the year 8 assumed sale price of $7,000,000 from figure 6

An impairment loss is reported because cash flow projections are less than book value

Amount of Impairment Loss

Beyond the Alloys Division

Discounted Cash Flows:

$9,000,000 x 2.5771 =	$23,193,900	(PV of ordinary annuity, *n*=3, *i*=8%)
$8,800,000 x 0.73503 =	$6,468,264	(PV of single sum, *n*=4, *i*=8%)
$15,500,000 x 0.68058 =	$10,548,990	(PV of single sum, *n*=5, *i*=8%)

Total Discounted Cash Flows: **$40,211,154**

Book Value: - $68,930,651

Impairment Loss: **$28,719,497 loss**

Allocation of Loss

Asset	**Book Value**	**% of Total Assets**	**Impairment Amount** ($28,718,497 x %)
Land	$2,000,000	2.90%	$832,865.41
Building	$7,040,000	10.21%	$2,932,260.64
Right of Use Asset- Equipment	$59,890,651	86.89%	$24,954,370.94
Total	$68,930,651	100%	$28,718,496.99*

*$.01 deviation due to rounding.

Journal Entry

Loss on Impairment	$28,719,497	
Right of Use Asset- Equipment		$24,954,371
Accumulated Depreciation		$2,932,261
Land		$832,865

Case 2: Everything Alloys Lease Impairment Case, Part 2

Part 2 offers an extension to part 1, requiring the application of lease accounting procedures both before and after the impairment of the lease. The information provided in part 1 should be used, where appropriate, in completing part 2. Additional information needed to complete part 2 is provided below.

Amortization table for Beyond the Alloy's division

	Lease Payment	Interest	Reduction of	Liability Balance
Inception				$93,095,550.89
1/1/X1	$ 15,000,000.00	$0.00	$ 15,000,000.00	$78,095,550.89
1/1/X2	$ 15,000,000.00	$6,247,644.07	$ 8,752,355.93	$69,343,194.96
1/1/X3	$ 15,000,000.00	$5,547,455.60	$ 9,452,544.40	$59,890,650.56
1/1/X4	$ 15,000,000.00	$4,791,252.04	$ 10,208,747.96	$49,681,902.60
1/1/X5	$ 15,000,000.00	$3,974,552.21	$ 11,025,447.79	$38,656,454.81
1/1/X6	$ 15,000,000.00	$3,092,516.38	$ 11,907,483.62	$26,748,971.19
1/1/X7	$ 15,000,000.00	$2,139,917.70	$ 12,860,082.30	$13,888,888.89
1/1/X8	$ 15,000,000.00	$1,111,111.11	$ 13,888,888.89	$0.00

Required:

1. Prepare the journal entries to:
    a. Record the first lease payment, which is made on 1/1/X1
    b. Determine the right of use asset amortization for year X1
    c. Provide the balance in the right of use asset account as of 12/31/X1
2. Prepare the journal entries to:
    a. Record the second lease payment, which is made on 1/1/X2
    b. Determine the right of use asset amortization for year X2
    c. Provide the balance in the right of use asset account as of 12/31/X2

3. Prepare the journal entries to:
    a. Record the third lease payment, which is made on 1/1/X3
    b. Determine the right of use asset amortization for year X3
    c. Provide the balance in the right of use asset account as of 12/31/X3
4. How is the periodic lease expense calculated after an impairment is recorded? Provide an appropriate citation to the accounting standards codification.
5. Prepare the journal entries (after impairment) to:
    a. Record the fourth lease payment, which is made on 1/1/X4
    b. Determine the right of use asset amortization for year X4
    c. Provide the balance in the right of use asset account as of 12/31/X4
6. For the lessee, by what amount is pre-tax income reduced each year in relation to the lease?

Case 2: Everything Alloys Lease Impairment Case, Part 2 Solutions

1. **Prepare the journal entries to:**
    a. **Record the first lease payment, which is made on 1/1/X1**

Lease Liability	$15,000,000	
Cash		$15,000,000

    b. **Determine the right of use asset amortization for year X1**

$8,752,355.93

    c. **Provide the balance in the right of use asset account as of 12/31/X1**

$84,343,194.96

2. **Prepare the journal entries to:**
    a. **Record the second lease payment, which is made on 1/1/X2**

Lease Liability	$8,752,355.93	
Interest Payable	$6,247,644.07	
Cash		$15,000,000

    b. **Determine the right of use asset amortization for year X2**

$9,452,544.40

    c. **Provide the balance in the right of use asset account as of 12/31/X2**

$74,890,650.56

3. **Prepare the journal entries to:**
    a. **Record the third lease payment, which is made on 1/1/X3**

Lease Liability	$9,452,544.40	
Interest Payable	$5,547,455.60	
Cash		$15,000,000

    b. **Determine the right of use asset amortization for year X3**

$10,208,747.96

    c. **Provide the balance in the right of use asset account as of 12/31/X3**

$64,681,902.60

4. **How is the periodic lease expense calculated after an impairment is recorded? Provide an appropriate citation to the accounting standards codification.**

"A lessee shall amortize the right-of-use asset on a straight-line basis, unless another systematic basis is more representative of the pattern in which the lessee expects to consume the right-of-use asset's future economic benefits. When the lease liability is remeasured and the right-of-use asset is adjusted in accordance with paragraph 842-20-35-4, amortization of the right-of-use asset shall be adjusted prospectively from the date of remeasurement" (ASC 842-20-35-7).

5. **Prepare the journal entries (after impairment) to:**
    a. **Record the fourth lease payment, which is made on 1/1/X4**

Lease Liability	$10,208,747.96	
Interest Payable	$4,791,252.04	
Cash		$15,000,000

    b. **Determine the right of use asset amortization for year X4**

$7,945,506.32- see calculations in the calculation section below

    c. **Provide the balance in the right of use asset account as of 12/31/X4**

$31,782,025.28- see calculations in the calculation section below

6. For the lessee, by what amount is pre-tax income reduced each year in relation to the lease?

Year 1- $15,000,000
Year 2- $15,000,000
Year 3- $39, 954,371.00 ($15,000,000 + $24,954,371.00)
Year 4- $11,920,058.53 ($7,945,506.32 + $3,974,552.21)
Year 5- $11,038,022.70 ($7,945,506.32 + $3,092,516.38)
Year 6- $10,085,424.02 ($7,945,506.32 + $2,139,917.70)
Year 7- $9,056,617.43 ($7,945,506.32 + $1,111,111.1)
Year 8- $7,945,506.32
Total over the 8-year period- $120,000,000

Calculations:

Question 4b

12/31/X3 ROU Asset Balance	$64,681,902.60
Impairment	-$24,954,371.00 (from part 1)
Post-Impairment Balance	$39,727,531.60

$39,727,531.60/ 5-year remaining life = **$7,945,506.32** straight-line amortization each year

Question 4c

New Schedule

Date	Calculation	ROU Asset Balance
1/1/X3	$64,681,902.60 - $24,954,370.00	$39,727,531.60
1/1/X4	**$39,727,531.60 - 7,945,506.32**	**$31,782,025.28**
1/1/X5	$31,782,025.28 - 7,945,506.32	$23,836,518.96
1/1/X6	$23,836,518.96 - 7,945,506.32	$15,891,012.64
1/1/X7	$15,891,012.64 - 7,945,506.32	$7,945,506.32
1/1/X8	$7,945,506.32 - 7,945,506.32	$0.00

Justification:

Straight-line amortization of the post-impairment right-of-use asset balance is used in accordance with Accounting Standards Codification section 842-20-25-7 which states:

"After a right-of-use asset has been impaired in accordance with paragraph 842-20-35-9, the single lease cost described in paragraph 842-20-25-6(a) shall be calculated as the sum of the following:

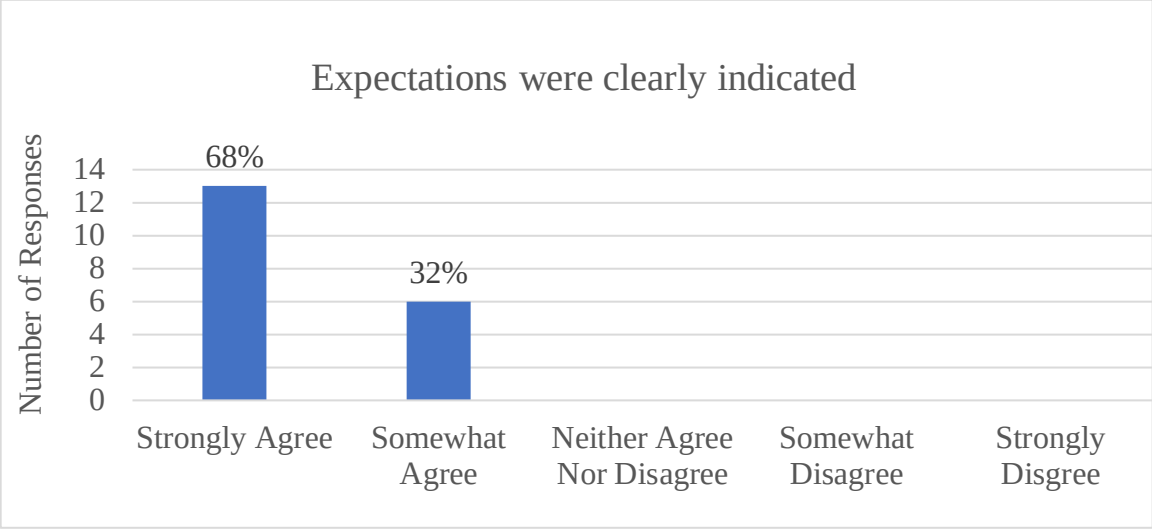
a. Amortization of the remaining balance of the right-of-use asset after the impairment on a straight-line basis, unless another systematic basis is more representative of the pattern in which the lessee expects to consume the remaining economic benefits from its right to use the underlying asset

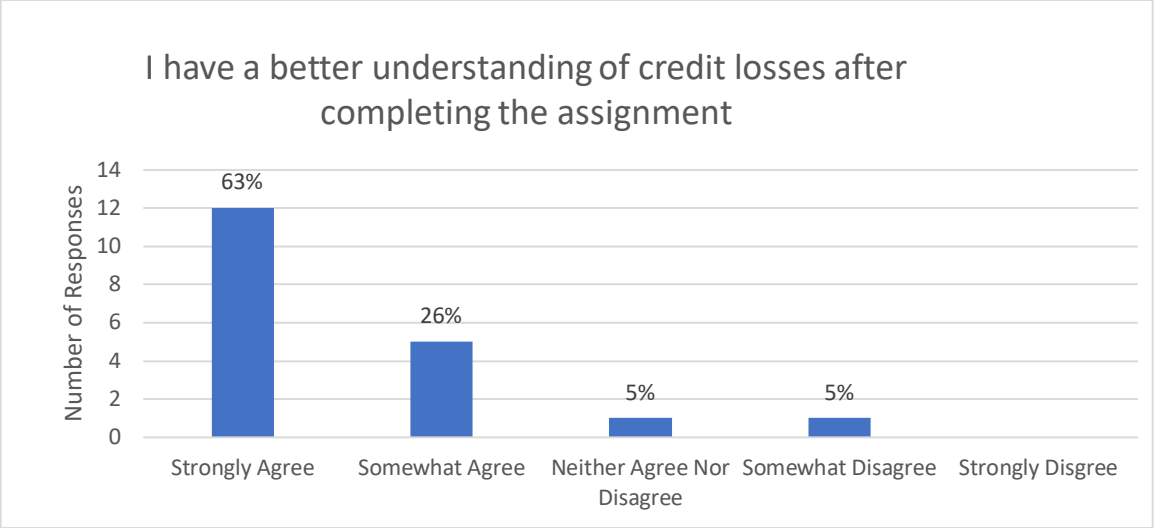
b. Accretion of the lease liability, determined for each remaining period during the lease term as the amount that produces a constant periodic discount rate on the remaining balance of the liability."

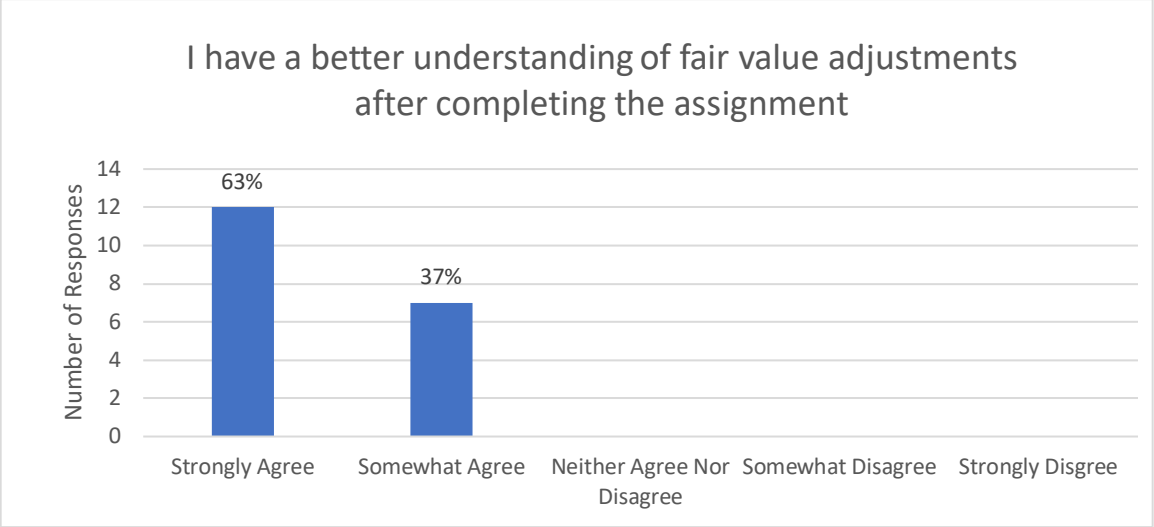
Discussion

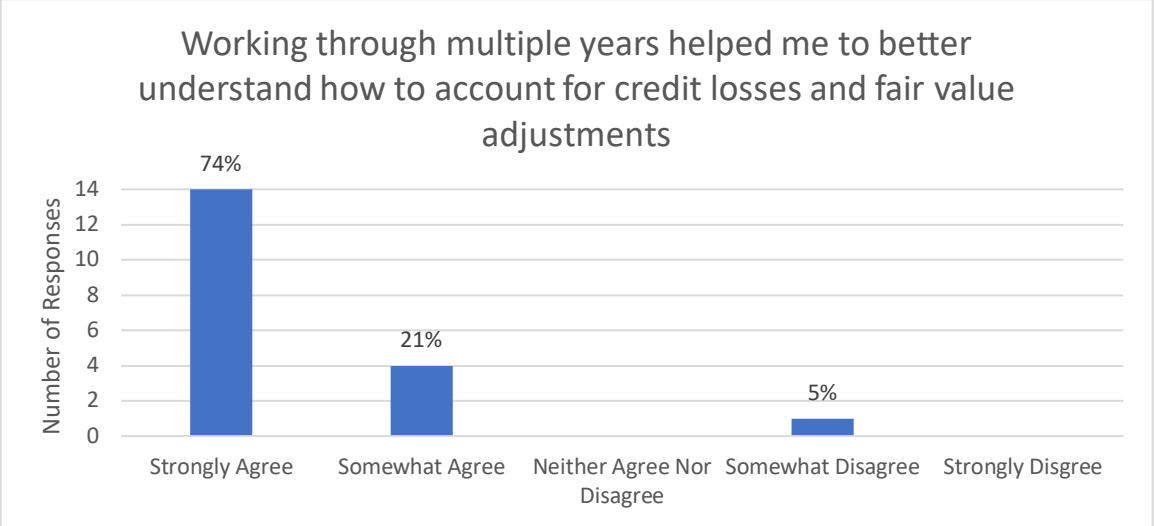
Case studies allow students to learn topics in an interactive way that involves the use of material that is connected to and relevant to real-world scenarios. Through this, they not only allow students to gain an understanding of real applications of the material but also allows them to make connections within the application of procedures and to practice the process from start to finish.

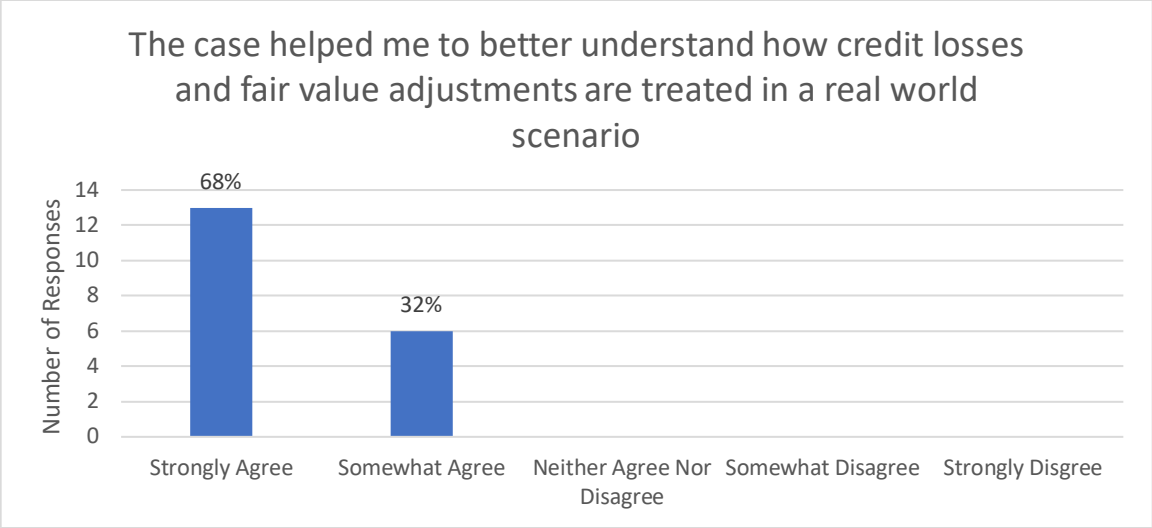
The Everything Alloys Credit Loss Impairment Case was administered to graduate students in an accounting theory course. After students completed the case, they were surveyed on how well the case study was written and how it enhanced their understanding of the material. They were asked 5 questions. The questions and responses were as follows:




I have a better understanding of credit losses after completing the assignment
Number of Responses
14
12
10
8
6
4
2
0
63%
26%
5%
5%
Strongly Agree
Somewhat Agree
Neither Agree Nor Disagree
Somewhat Disagree
Strongly Disgree


I have a better understanding of fair value adjustments after completing the assignment
Number of Responses
14
12
10
8
6
4
2
0
63%
37%
Strongly Agree
Somewhat Agree
Neither Agree Nor Disagree
Somewhat Disagree
Strongly Disgree


Working through multiple years helped me to better understand how to account for credit losses and fair value adjustments
Number of Responses
14
12
10
8
6
4
2
0
74%
21%
5%
Strongly Agree
Somewhat Agree
Neither Agree Nor Disagree
Somewhat Disagree
Strongly Disgree



As indicated by these responses, students generally agree that this case study helped them to gain a better grasp on the material including fair value adjustments and the treatment of credit losses through the process of applying them to a situation that simulated a real-world scenario.

Part 1 of case 2, the Everything Alloys Lease Impairment Case, was administered to undergraduates in an intermediate accounting course. While these students were not surveyed, the questions raised to their professor showed that they had difficulty answering question 3, which required them to research the Accounting Standards Codification (ASC) to determine which amounts should be used in determining future cash flows for an asset group.

Many of them found it difficult to read the ASC to find why they would consider future cash flows when estimating fair value. The first question, requiring them to consider why management would conduct impairment testing in the first place reminded them that impairment testing is not something that management would regularly perform unless economic conditions warrant testing. While these students may have struggled with some of the material, they ultimately learned a lot through the completion of the case study. They specifically mentioned how the case helped them to get a better grasp on the treatment of impairments and noted that it

left them well prepared to respond to questions involving impairments on their exam. These students responded very well to the case study model and some students asked for more case studies on future topics.

These cases show relevance to the current situation amid the COVID-19 outbreak. As unemployment rates rise, some individuals may not be able to make their loan payments, leading to an increase in expected credit losses that must be accounted for following the new standard. Moreover, as companies struggle to maintain sales and production due to business closures and decreased spending on non-essential items, they may have to conduct impairment testing on their fixed assets using the process in the second case. Operating leases are among these assets that may be tested for impairment under the new implications of the lease standard.

Conclusion

The new credit loss and lease standards issued in the past few years have changed the way that companies account for credit losses and operating leases. The case studies contained within this document were created to allow students to develop a stronger understanding of these new accounting topics. These case studies also incorporate other accounting topics commonly considered along with credit losses and leases to offer students to look at these situations with a comprehensive view.

The credit loss standard was incorporated into the first case along with the topic of fair value adjustments as they apply to asset-backed securities, requiring students to distinguish between credit losses and fair value adjustments and consider the impact on comprehensive income. Working through multiple years allowed students the opportunity to practice the application of these topics from the purchase of the asset to its sale, including both increases and decreases in

the asset's value. While the decrease in the asset's value required students to adjust the fair value and recognize a credit loss, the increase in the fair value required students to incorporate a credit reversal and increase in fair value in order to determine the proper accounting treatment.

Part one of the second case, aimed toward undergraduate students in intermediate accounting, incorporated the impairment of an operating lease; a consideration under the new lease standard. The case, which allowed students to discover how future cash flows may be considered in determining impairment, helped students to gain a better understanding of the material through both researching and applying the ASC. Part 2 of the case specifically incorporated the new lease standard, requiring students to complete the journal entries to record the lease from its inception through the year after impairment and to consider the effect the lease and its impairment have on net income throughout the life of the lease.

These case studies, which were created to allow students to develop a better grasp on current accounting topics such as the new credit loss and lease standards, have shown to be effective study tools. Situations echoing possible real-life scenarios were used to add a better sense of realism to the cases and to make the cases more interesting, as students followed the ups and downs of the economic conditions facing Everything Alloys.

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